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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,546	01/23/2002	Kyle G. Brown	RSW920010178US1	8874

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EXAMINER	
OPIE, GEORGE L	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 06/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/055,546	Brown et al.	
	Examiner	Art Unit	
	George L. Opie	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

1) X Responsive to communication(s) filed on 17 March 2006 .

2a) X This action is **FINAL**. 2b) ___ This action is non-final.

3) ___ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) X Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ___ Claim(s) _____ is/are allowed.

6) X Claim(s) *1-13* is/are rejected.

7) ___ Claim(s) _____ is/are objected to.

8) ___ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ___ The specification is objected to by the Examiner.

10) ___ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ___ The proposed drawing correction filed on _____ is: a) ___ approved b) ___ disapproved.

12) ___ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13)_ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ___ All b) ___ Some * c) ___ None of the CERTIFIED copies of the priority documents have been:

1. ___ received.
2. ___ received in Application No. (Series Code / Serial Number) _____.
3. ___ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ___ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

14) ___ Notice of References Cited (PTO-892)
15) ___ Notice of Draftsperson's Patent Drawing Review (PTO-948)
16) ___ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
17) ___ Interview Summary (PTO-413) Paper No(s). _____.
18) ___ Notice of Informal Patent Application (PTO-152)
19) ___ Other:

DETAILED ACTION

This Office Action is responsive to Applicant's request for reconsideration filed 17 March 2006.

1. Request for copy of Applicant's response on floppy disk:
Please help expedite the prosecution of this application by including, along with your amendment response in paper form, an electronic file copy in WordPerfect, Microsoft Word, or in ASCII text format on a 3½ inch IBM format floppy disk. Please include all pending claims along with your responsive remarks. Only the paper copy will be entered -- your floppy disk file will be considered a duplicate copy. Signatures are not required on the disk copy. The floppy disk copy is not mandatory, however, it will help expedite the processing of your application. Your cooperation is appreciated.

2. Descriptive Title Required
The title of the invention is not descriptive. The title should be as "specific as possible" 37 CFR 1.72 while not exceeding "500 characters in length". The title should provide "informative value" and serve to aid in the "indexing, classifying, searching" and other Official identification functions. A new title is required that is clearly indicative of the invention to which the claims are directed. MPEP606.01

3. Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 6, 7, 9-11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moore et al.** (U.S. Pat 6,408,342) in view of Sundius et al. (PGP 2003023577 A1).

As to claim 1:

Moore teaches the invention as claimed including a multi-protocol object distribution system *(e.g., a communication framework supporting multiple communications protocols; see the abstract and col.6, lines 23-32)* comprising:

a plurality of remote procedure call transport protocol stubs *(e.g., ONC RPC, DCE RPC, CORBA IIOP, SMTP, SNMP, HTTP, and Java/RMI. Corresponding to each protocol is a Remote Procedure Call Transport 305; col.8, lines 1-4)*; and

a meta-stub configured to establish a communicative link with a distributed object using a default RPC transport stub (*current binding for the ObjectReference 501 . . . establish the connection using that current binding; col. 20, lines 2-5 and fig. 12*) select individual ones of the RPC transport protocol stubs through which distributed object services can be provided to requesting clients in the object distribution system *(stub object 303 contains a decision logic for determining which protocol to use in accessing the target object of a remote method invocation...the protocol with the matching the Quality of Service (QoS) required by the Stub 303 is selected; col.19, lines 37-54)*.

Moore does not explicitly disclose the additional limitations detailed below.

Sundius teaches the messaging request for establishing a connection and "as a result of the bind process . . . the client using the same connection and the same protocol as the request", prgh[0087] which corresponds to the reestablishing the communicative link using the selected RPC protocol stub.

It would have been obvious to combine Sundius'es teachings with Moore because the conversion facility via multiple proxy/stub objects would greatly increase the adaptive capability of client/server communications.

As to claim 2:

Moore teaches the RPC transport protocol stubs comprise: a default RPC transport stub *(e.g., a current binding for the ObjectReference 501; col. 20, lines 2-5)*, the meta-stub having a further configuration for automatically selecting the default RPC transport stub by default *(e.g., the selection of a protocol is dynamic; col. 7, lines 52-53)*; and, at least one other RPC transport stub which the meta-stub can select based upon changing conditions in the object distribution system *(e.g., protocol is being used may changed from one invocation of a remote method to the next ; col.7, lines 53-54)*.

As to claim 6:

Moore teaches the invention as claimed including in a multi-protocol object distribution system *(e.g., a communication framework supporting multiple communications protocols; see the abstract and col.6, lines 23-32)*, a remote procedure call processing *(e.g., a remote procedure call class, one remote procedure call transport; see the abstract)* method comprising:

receiving an RPC request for services from a distributed object in a server in the multi-protocol object distribution system *(e.g., the Stub object receives a remote method invocation; col. 20, lines 1-2 and fig. 12)*;

establishing a communicative link with the distributed object using a default RPC transport mechanism *(if there is a current binding for the ObjectReference 501, the decision logic attempts to establish the connection using that current binding; col. 20, lines 2-5 and fig. 12)*, and querying the distributed object over the communicative link for other RPC transport mechanisms *(e.g., querying the various registered RPC_Transports 305; col.21, lines 8-10 and lines 36-43)* which are supported by the server *(e.g., those registered in the supported protocols list 417; col. 21, lines 9-10);*

selecting one the other RPC transport mechanisms (e.g., *the protocol with the matching the Quality of Service (QoS) required by the Stub 303 is selected; col.19, lines 51-54)* and re-establishing the communicative link with the distributed object using the selected RPC transport mechanism *(e.g., If the queried RPC_Transport 305 indicates that it can make the connection and meet any required QoS conditions, step 624, the decision logic attempts to establish the connection ... indicating that a communication channel has been established; col.21, lines 13-22)*; and

processing the RPC request for services from the distributed object over the re-established communicative link *(fig. 12 and 13 show the purpose of selecting a protocol and establishing a communication link is to process the RPC request for services).*

Moore does not explicitly disclose the additional limitations detailed below.

Sundius teaches the messaging request for establishing a connection and "as a result of the bind process . . . the client using the same connection and the same protocol as the request", prgh[0087] which corresponds to the reestablishing the communicative link using the selected RPC protocol stub.

It would have been obvious to combine Sundius'es teachings with Moore because the conversion facility via multiple proxy/stub objects would greatly increase the adaptive capability of client/server communications.

As to claim 7:

Moore teaches detecting a deterioration in communications over the new communicative link *(e.g., if the QoS provided by RPC_Transport 305 deteriorates during the course of the execution of a program; col.21, lines 44-46)*; further reestablishing the communicative link with the default RPC transport mechanism; and, continuing to process the RPC request for services over the further reestablished communicative link (e.g., *repeat the procedures of FIGS. 13 and 12 at any invocation of a method of a remote object; col.21, line 44-50).*

As to claim 9:

Moore teaches surveying network conditions *(e.g., querying the various registered RPC_Transport 305; col.21, lines 8-9)*; and, selecting one of the RPC transport mechanisms best suited to provide a predetermined level of Quality of Service (QoS) in view of the surveyed network conditions *(e.g., If the queried RPC_Transport 305 indicates that it can make the connection and meet any required QoS conditions, step 624, the decision logic attempts to establish the connection; col.21, lines 14-18).*

As to claims 10, 11, and 13:

Note the rejection of claims 6, 7, and 9 above. Claims 10, 11, and 13 are the same as claims 6, 7, and 9, except claims 10, 11, and 13 are machine readable storage claims and claims 6, 7, and 9 are method claims.

5. Claims 3-5, 8, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Moore** and Sundius as applied to claims 1, 6 and 10 respectively, and further in view of **Mein et al.** (U.S. Pat 6,782,542).

As to claim 3, Moore as modified by Sundius does not specifically teach a simple object access protocol over hypertext transfer protocol stub.

Mein teaches a simple object access protocol over hypertext transfer protocol stub *(e.g., A Simple Object Access Protocol ... layered on top of HTTP; col.3, lines 18-21).*

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mein with Moore **as modified** because Mein's teachings would have allowed Microsoft Component Object Model Automation objects to be accessed and methods to be invoked over the Internet through Web servers protected by firewalls.

As to claim 4, see the discussion of claim 3 supra in regards to the use of a SOAP over HTTP stub.

As to claim 5:

Moore teaches the RCP transport protocol stubs further comprises, among other things, a remote method invocation *(e.g., Java/RMI; col. 7, lines 16-19 and col.8, lines 5-8)* over Internet Inter-ORB Protocol stub *(e.g., CORBA IIOP; col. 7, lines 16-19 and col.8, lines 5-8).*

As to claim 8, Moore does not specifically teach determining whether the requested service implicates asynchronous or synchronous messaging; and, selecting an optimal RPC transport mechanism supported by the server based upon the determination.

Mein teaches determining whether the requested service implicates asynchronous or synchronous messaging; and, selecting an optimal RPC transport mechanism supported by the server based upon the determination *(e.g., when the server 30 receives the HTTP POST message...invokes a SOAP stub...based on an identifier contained in the header of the data structure; col.5, lines 39-45).*

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Mein with Moore **as modified** because Mein's teachings would have provided the capability for efficiently performing protocol-mandated data transformations.

As to claim 12, see the rejection of claim 8 above. Claim 12 is the same as claim 8, except claim 12 is a machine readable storage claim and claim 8 is a method claim.

6. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure. Specifically, the below reference(s) will also have relevancy to one or more elements of the Applicant's claimed invention as follows:

U.S. Patent No. 6,839,897 to Takagi which teaches the multi-protocol correlation/connection using stub classes;

U.S. Patent No. 6,446,137 to Vasudevan et al. which teaches the liaison mechanisms for managing RPCs among diverse systems; and,

U.S. Patent No. 6,347,342 to Marcos et al. which teaches the inter-object communications through selected stub adapters.

7. Response to Applicant's Arguments:

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt*, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969)

Applicant argues (claims 1, 6 and 10) that the teachings of Sundius as combined with Moore's teachings do not make obvious the communicative link using a RPC mechanism as recited. Contrary to Applicant's contention, the referenced prior art teachings from Sundius and Moore do meet the claimed RPC connectivity provisions to facilitate object interactions. The cited prior art teachings do render obvious the RPC stub collection -- selection for improving compatibility/communications as claimed.

The scope of the claimed "RPC transport mechanism" clearly transcends the more narrow scope that Applicant attempts to impute through argument. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art, In re Self, 213USPQ1,5 (1982); In re Priest, 199 USPQ 11 (CCPA 1978). The claimed "communicative link" elements are clearly subject to a broad interpretation, as detailed in the rejections maintained above. As referenced supra, the Examiner has a *duty* and *responsibility* to the public and to Applicant to interpret the claims *as broadly as reasonably possible* during prosecution (*In re Prater, 56 CCPA 1381, 415F.2d 1393, 162 USPQ 541 (1969)*).
See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (1989) "During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.".

Limitations appearing in the specification but not recited in the claim are not read into the claim. *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir.. 2003). claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily. (see *Prater supra at 1404-05, 550-551).*

Applicant also argues that the Sundius and Moore teachings lack proper motivation for the subject combination as set forth supra.
In response, Examiner notes that the test for the relevance of a cited combination of references is: "whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention," *In re Gorman*, 933 F.2d at 986, 18 USPQ2d at 1888. Subject matter is unpatentable under section 103 if it 'would have been obvious ... to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or prior art specifically suggest making the combination: *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988)." Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and the use of that teaching to solve the same [or] similar problem which it addresses. *In re Wood*, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979). "In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found in a specific reference." *In re Oetiker*, 24 USPQ2d 1443 (CAFC 1992).

Applicant should set forth claims in language that clearly, distinctly, unambiguously and uniquely define the invention. The fact that Applicant has not narrowed the definition/scope of the current claims implies that Applicant intends an extensive coverage breadth of the claims, which is met by the prior art teachings of Sundius and Moore.

The re-establishing the communincative link with the distributed object using a default RPC transport mechanism, in the manner recited in the pending claims does not constitute a non obvious improvement over the prior art.

Applicant's arguments, filed 17 May 2006, have been fully considered but are not deemed to be persuasive. For the reasons detailed above, the rejections are maintained as set forth in the previous Office Action under ***35 U.S.C.*** § ***103.***

8. THIS ACTION IS MADE FINAL.

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE

ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Contact Information:

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

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All responses sent by U.S. Mail should be mailed to:

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Hand carried responses should be delivered to the *Customer Service Window* (Randolph Building, 401 Dulany Street, Alexandria, Virginia 22314) and, if submitting an electronic copy on floppy or CD, to expedite its processing, please notify the below identified examiner prior to delivery, so that the Applicant can "handoff" the electronic copy directly to the examiner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Opie at (571) 272-3766 or via e-mail at *George.Opie@uspto.gov*. Internet e-mail should not be used where sensitive data will be exchanged or where there exists a possibility that sensitive data could be identified unless there is an express waiver of the confidentiality requirements under 35 U.S.C. 122 by the Applicant. Sensitive data includes confidential information related to patent applications.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER